Driving Business Excellence Through Innovative IT Service Management

IT service management is now driving business-IT alignment. But for it to succeed, IT organizations need to left-shift service support activities, utilize best-in-breed technology, and adopt output- and outcome-based delivery to drive service excellence and enhanced business value.
Executive Summary

With ever increasing business complexity and global competitiveness, coupled with an explosion in new and disruptive technologies, there has never been a greater need for business-IT alignment. As a key interface driving significant interactions between business and IT, IT service management is increasingly becoming a top CIO agenda. Organizations are evolving their IT service management strategies to address a more dynamic, consumer-driven universe, in which IT services are the driver of enhanced business value. In addition, organizations are re-doubling their focus on service innovation to spur IT operating excellence.

The IT service management lifecycle covers four broad aspects: service intake management, situation/issue analysis, resolution/fulfillment and continuous improvement. This white paper presents innovative strategies to improve service intake management – the front line of the IT service management dimension – to add tangible business value in terms of improved customer satisfaction, faster response/resolution time, better service quality and reduced operating costs. Based on our experience with implementing end-to-end IT service management strategies for Fortune 100 clients, we have developed four top best practices to innovate service intake management:

- **Left-shift** service intake activities by enabling self-service, leveraging service catalogs and increasing upfront business/IT involvement in prioritizing application-specific service requests.

- **Leverage technology to integrate information from multiple channels**, mine the information to create smart issue resolution strategies and facilitate a seamless workflow to enable efficient service fulfillment.

- **Create a vibrant and skilled service management workforce** focused on improving customer experience to drive overall service excellence.

- **Deploy business output- and outcome-based service delivery** across the end-to-end IT service management lifecycle by leveraging managed services.
Beyond “Keeping the Lights On”

The days of “business as usual IT” are long gone. A shared understanding of IT services, coupled with disruptive technologies (social, mobile, analytics and cloud, or the SMAC Stack™), is driving business to take greater ownership of IT support services needs. Also, as enterprises across industries contend with prolonged economic uncertainty and ever-changing market dynamics, a focus on operational excellence has taken center stage. To this end, IT operations organizations are continuously asked to provide support services better, faster and cheaper. This change is driven by a range of influences that focus on the fundamental aspects of service management: processes, technology, people and delivery.

Key Drivers for IT Service Management Innovation

The key drivers for IT service management innovation include:

• **Emergence of technology-savvy business stakeholders willing to self-serve.** IT organizations need to be increasingly sensitive to the growing needs of millennial workers, many of whom are extremely technology-savvy, well-informed and independent-minded. They use a range of smart devices in their personal life and expect to use them at work, as well. They expect lightning-speed issue resolution and are willing to put in the effort to resolve issues themselves. IT operations organizations must find opportunities to satisfy these business users with a high-quality service experience, leveraging contemporary technologies and providing services across multiple channels.

• **Greater use of modern and agile service management platforms that support user-driven interaction and workflows.** Legacy service management systems are constrained in their ability to serve evolving business needs, both in terms of their scalability and performance. Next-generation service management solutions can support these needs while also being easy to configure, deploy and upgrade. Because they are pre-configured with social and mobile interfaces and support flexible workflows through interactive interfaces, these solutions ultimately improve the customer experience. The advent of these next-generation service management solutions, such as Remedyforce from BMC and ServiceNow, provide an increased impetus for organizations to change and innovate.

• **Ever-expanding scope of support services due to the proliferation of applications/systems.** Today’s technology ecosystem is exceptionally complex due to a wide range of interconnected applications/systems that support continuous business-critical operations. Coupled with this, the lack of application governance at many organizations has resulted in a significant “technical debt” that needs to be managed. This situation has put increased stress on IT operations organizations to support a constantly expanding service scope. A skilled workforce with technical know-how across the breadth of services, coupled with an excellent customer orientation, is becoming a critical success factor.

• **Sustained CIO mandate to decrease operational costs while improving customer satisfaction with service management innovations.** Typically, IT operations serve to “keep the lights on” for the organization. Hence, CIOs increasingly scrutinize the support capacity to ensure optimal staffing. The consequent challenge is to keep customers satisfied by leveraging the capacity available to efficiently serve requests, within a reasonable turnaround time. This results in an increased emphasis on service management innovation through new-age service delivery models, such as managed services and business output- and outcome-based service delivery models.
It is essential to consider the impact of these drivers across the IT service management lifecycle while planning transformative business-IT changes.

**IT Service Management Lifecycle**

As previously noted, the IT service management lifecycle comprises four important functions: service intake management, situation/issue analysis, resolution/fulfillment and continuous improvement.

- **Service intake management**: As the first and most critical customer touchpoint in the IT service management lifecycle, this function encompasses activities that enable customers to connect with IT for their service needs. It includes several levels of support, including L0 (self-service or system-supported output), L1 (informational request) and L2 (assistance provided based on known error database, or KEDB) support.

- **Situation/issue analysis**: This function includes activities that enable the IT operations organization to prioritize and understand the service request in detail and plan for an appropriate resolution. It includes L3 (quick patches or fixes) and L4 (minor enhancements and defects) analysis for support.

- **Resolution/fulfillment**: This function includes activities that guide IT organizations in taking the necessary steps to perform and publish the resolution to the customer.

- **Continuous improvement**: This is an overarching function that helps identify incremental efficiencies in each of the above functions, leveraging aspects such as customer feedback, innovation and analytics.

While it is important to operate with a high degree of efficiency across each of these functions, the most vital function is service intake management, as it is the entry to direct customer interaction. Organizations are striving to make this function not just efficient but also capable of driving systematic innovation.

**A Practical and Innovative IT Service Intake Management Framework**

Comprised of four fundamental dimensions, our IT service intake management framework provides a practical approach to innovation.

- **Process and capability**: Enhancing service intake through well-defined processes and specific capabilities (e.g., service catalog, self-service portals and business-driven prioritization).

- **Technology**: Leveraging modern and integrated technologies to optimize intake and fulfillment (e.g., multi-channel support, workflow-driven service management, analytics).

- **People**: Equipping the workforce with leading people practices (e.g., training on interpersonal skills).

- **Delivery**: Adopting contemporary and efficient delivery mechanisms across the lifecycle (e.g., managed services).

Analyzing the maturity of the IT operations function against each of these dimensions helps identify improvements that enable key business outcomes, such as improved customer satisfaction, faster response/resolution time, better service quality and reduced operating costs. Based on our experience working with Fortune 100 clients to define their IT service management strategies, we have identified the top best practices for innovating service intake management (see Figure 1, next page).
Best Practice 1

**Left-shift service intake activities by enabling self-service, leveraging service catalogs and increasing upfront business/IT involvement in prioritizing application-specific service requests.**

When companies enable the left-shift of service intake, they can increase the business transparency of service delivery, thereby improving customer satisfaction. Best practices for effectively left-shifting service intake management include:

- **Embrace self-service.** Enabling users (based on pre-authorized credentials) to take care of their own requests can drive quicker resolution. Routine activities (e.g., compensation/benefit planning, password reset, etc.) can be automated. Providing context-sensitive help can also dramatically reduce the volume of service requests. With the rise of millennial knowledge workers who are willing to take responsibility for issue resolution, enabling self-service proves to be a win-win proposition for both the business and IT teams.

- **Create a service catalog.** A service catalog presents a pre-defined list of services that can be ordered by customers from a unique location. When supported with rule-based workflow triggers, service requests can be routed to the relevant team of experts, increasing the efficiency of service intake.

- **Ensure upfront business involvement in validating and prioritizing application-specific service requests.** At an enterprise level (rather than a business unit/line-of-business level), this can help drive increased business accountability of IT service management. By identifying specific roles within the business, and defining responsibilities to support these activities (see Figure 2, next page), the business can actively drive the pipeline of service requests. This optimizes service intake by eliminating redundant requests, while providing improved visibility into ongoing analysis and resolution.

Key benefits of this approach include:

- Improved customer satisfaction due to quick turnaround, greater commitment and IT transparency.
• Avoidance of repetitive and redundant requests, freeing up valuable time for the support team to focus on improving service quality.

Some innovative examples of this include:

• **An intuitive self-help portal**: Organizations are using comprehensive and simple-to-use self-service portals to left-shift service management. Configurable and automated service request workflows are being deployed to reduce workload on the IT support staff.

• **Shopping cart for service request ordering**: A shopping cart interface for the service catalog promotes user prudence in raising requests, as they have clear visibility into the associated cost-to-service equations of these requests.

**Best Practice 2**

**Leverage technology to integrate information from multiple channels, mine the information to create smart issue resolution strategies and facilitate a seamless workflow to enable efficient service fulfillment.**

Technology is a pivotal driver for efficiency improvements across the IT service management lifecycle. Best practices to effectively leverage technology to drive efficient service intake management include:

• **Apply multi-channel support**: Deploy modern practices and platforms to accept service requests in a streamlined fashion to minimize business disruption while improving satisfaction levels. It is essential for the IT operations team to serve customers efficiently, leveraging various channels (see Figure 3, page 9).

  Typical new-age support channel strategies include provisioning of chat-/video-based help desks, including pre-defined rules within applications to direct users to live help desk agents or to self-help sources, leveraging trained help desk personnel to interact with customers and even take control of their environment.
to provide immediate support. This includes integrating mobile apps with other IT service management systems to trigger seamless workflows and enable quick issue resolution.

- **Use advanced analytics:** As the service intake repository contains valuable information about an organization's service requirements, there is opportunity to mine this information to determine proactive resolutions. Typically, service intake repositories include both structured and unstructured data. Organizations that leverage best-in-class analytics solutions to identify hidden problem patterns within this data set have been known to significantly decrease repetitive issues reported to IT.

In addition to analytics-driven proactive problem resolution, other critical metrics should also be continuously monitored, such as first-call resolution, average response time, average resolution time, customer feedback rating and ticket closure rate. This can be enabled through techniques such as trending (e.g., recurring issues, backlogs) and forecasting (e.g., release cycle correlation to service request volume). Pulling these insights into a real-time service management dashboard that allows for various levels of information access can act as a key enabler for introducing timely interventions.

- **Facilitate seamless IT service management workflow:** Service intake management should be well-integrated with the downstream functions and processes (i.e., issue analysis, fulfillment and continuous improvement) to ensure resolution efficiency. This can be done with automatic tool-driven workflow triggers based on intelligent routing rules and escalation mechanisms.

Key benefits of this approach include:

- Better ability to prioritize key problem areas and work toward resolution.
- Quick turnaround for end-user issues based on automated alerts and intelligent routing.
- Better utilization of support staff time based on their skills and areas of expertise.

---

**Quick Take**

**Practicing What We Preach**

We enable self-service for our 170,000-plus global workers. Activities such as benefits planning, distribution list management, password reset, etc. can all be completed by employees. A single sign-on feature is leveraged to ensure secure and authorized transactions, which is also integrated with a mobile platform that provides real-time alerts and status updates.

This approach has resulted in a considerable reduction in service request volume. For example, password-related calls to the service desk have decreased by about 10,000 calls per month, freeing up valuable time for the service desk to focus on more critical activities.
Some of the innovation approaches we have witnessed include:

- **In-context video help desk**: Devices/applications are integrated with a video help desk that will trigger support alerts for immediate assistance. Support personnel have access to the user environment and can provide immediate guidance in an interactive manner.

- **Unstructured call analysis**: Organizations are converting voice calls from customers into text and then analyzing them with natural language processing to identify customer disposition and plan appropriate interventions.

**Best Practice 3**

Create a vibrant and skilled service management workforce focused on customer experience to drive service excellence.

Despite the advances in self-service technology and increased user acceptance, it is still true that there is no substitute for human interaction. To improve the quality of services provided, it is essential to create a customer-oriented workforce that has the necessary soft skills to complement its technical know-how. The support team must be able to understand customer needs and the context of the service request. Dedicated training programs are needed that help improve the technical knowledge of the team, as well as its communication skills and etiquette.

With end users continuing to leverage the IT service desk as the most critical point of contact for IT support, it is all the more important to adequately reskill the support team. The impact of such comprehensive reskilling programs must be assessed by measuring customer feedback.
Quick Take

Improving First-Call Resolution for a Large Insurer

We built a comprehensive analytics framework for a large U.S.-based life insurance company to improve its IT service desk operations (e.g., first-call resolution, cost to serve, staff productivity, recurring issues trending, manual tasks trending, ticketed vs. non-ticketed effort, etc.).

By deploying dedicated analytics for key transactions, we delivered a 20% to 25% improvement in first-call resolution and a 15% to 20% improvement in staff productivity by increasing insights into triggers that caused recurring issues.

Quick Take

Insurer Refocuses on Customer Satisfaction

Working with one of the largest U.S.-based providers of insurance, annuities and employee benefit programs, we built a skilled team to support the company’s application portfolio, leveraging a structured people management program.

The program provided a framework to recognize the staff’s contribution, based on timeliness, specificity and frequency. A systematic approach to measure customer satisfaction was defined and was supported by an easy-to-use rating tool. This resulted in a 15% improvement in business satisfaction ratings within six months of implementation.
The customer experience lifecycle spans the initial need for support, all the way through to the customer recommending the service they received to co-workers. Interactions at every point in this lifecycle must be managed effectively. It is important to measure customer experience across three considerations — comfort during interaction, simplicity of resolution process and relevance of resolution. Creating a customer satisfaction score, or CSS (see Figure 4), to measure these aspects will help drive continuous improvement in customer satisfaction.

Key benefits of this approach include:

- Highly satisfied customers who champion the IT operations team and its services.
- Direct line of sight into issues being faced by customers.

In our client experiences, we have come across the following innovative examples:

- **User persona-driven service delivery:** Dedicated customer experience teams are established within IT to clearly identify user personas (i.e., user categories based on aspects such as request frequency, engagement disposition, business area, designation, etc.) to devise tailored experience strategies.

- **Service management talent strategy focused on collaboration:** When organizations collaborate on service fulfillment, the collective wisdom of the service management staff grows; therefore, the performance objectives of experienced staff are aimed at collaborative problem resolution. Organizations are investing in requisite infrastructure to enable productive collaboration.

**Best Practice 4**

**Deploy business output- and outcome-based service delivery across the end-to-end IT service management lifecycle by leveraging managed services.**

As IT service management becomes increasingly commoditized, it is vital to establish a delivery model in which vendors are responsible for end-to-end IT operations. They should be progressively empowered to own the supporting processes, tools and infrastructure. In this model, service intake will be optimized through leading practices such as deployment of service catalogs, core-flex resourcing and continuous service improvement. An enhanced collaboration mechanism to share work queues between vendor technicians (for support) and in-house experts (for review/approval) is needed to optimize turnaround time from the point of service intake.

**Customer Satisfaction Measurement**

<table>
<thead>
<tr>
<th>Customer Satisfaction Criteria</th>
<th>Rating* (4 or 5) [A]</th>
<th>Rating* (1 or 2) [B]</th>
<th>Net Rating [A-B]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfort</td>
<td>80%</td>
<td>5%</td>
<td>75%</td>
</tr>
<tr>
<td>Simplicity</td>
<td>85%</td>
<td>5%</td>
<td>80%</td>
</tr>
<tr>
<td>Relevance</td>
<td>90%</td>
<td>5%</td>
<td>85%</td>
</tr>
<tr>
<td>Average Customer Satisfaction Score</td>
<td></td>
<td></td>
<td>80%</td>
</tr>
</tbody>
</table>

* Note: Ratings are on a scale of 1-5, with 5 being excellent and 1 being very poor. Figure 4
 Increased sourcing maturity will shift IT pricing models from traditional input-based models focused on cost-savings (e.g., time and materials, fixed bid) to value-focused and output-/outcome-based models (e.g., transaction-based, gain-sharing) models. Risk-reward-based contracts that delineate ownership of business outcomes for which the vendor partner is responsible help drive efficiency and reduce overall risk of delivery for IT operations organizations.

By implementing these practices as a managed service owned by vendor partners, businesses can drive greater efficiencies, resulting in reduced total cost of ownership (TCO). However, a phased approach needs to be adopted. A crucial step is assessing the vendor partner’s credentials for deploying the key ingredients of a managed services model (see Figure 5).

Among the key benefits of this approach:

- Improved cost savings due to productivity improvements, economies of scale and strategic sourcing.
- Better cross-skilling of resources and improved leverage of best practices.

Innovative approaches we have seen through our work with clients include:

- **Ticket volume-based service pricing:** The improved ability of IT service management vendors to predict service demand has caused ticket volume-based pricing to become the new norm within IT service contracts.
- **Integrated (i.e., applications and infrastructure) service intake:** Increasingly, organizations are combining service intake management for both applications and infrastructure by establishing a common service desk to harness the inherent service synergies. The resulting consolidation makes this an ideal candidate for managed service delivery.

---

**Key Ingredients of a Managed Services Model**

![Diagram](image)
Quick Take

Improving IT Operations Productivity, Reducing Infrastructure Costs at a Leading Publisher

We recently helped a leading U.S.-based news publishing company create a cost-efficient solution for managed infrastructure support. We provided a single-point, enterprise-grade service desk for the client’s infrastructure support needs and implemented ITIL®-based ISO 20000 standards delivering cost and productivity improvements.

By leveraging standardized processes for the service desk, the publishing company saw a nearly 10% to 15% improvement in support team productivity. The infrastructure cost savings, combined with the team’s productivity improvements, resulted in a 20% reduction in IT operations costs.

Quick Take

Establishing Business Value-Driven Service Intake Management at a Leading U.S. Insurer

A U.S.-based Fortune 500 company providing insurance and investment management services perceived increasing dissatisfaction among business users due to the lack of clarity on service request fulfillment, including intake, status, resolution time, release date, etc. Meanwhile, an expanding portfolio of applications was causing an increased level of service requests for the IT operations team.

Due to capacity constraints, the IT operations team did not have a systematic approach to prioritize and fulfill service requests, resulting in an ever-growing backlog.

Challenge

The insurer needed to establish a business value-driven service intake and management model supported by modern platforms, industry standards and best practices to improve customer satisfaction through better management of service requests.

Solution

- Defined a business value-driven service intake and management model as a unified gateway for channeling demand in partnership with the business and IT.
- Deployed a single point-of-entry for service intake with multi-channel support across phone, e-mail, mobile, chat and portals.
- Established an industry-standard IT service management workflow tool, based on a comprehensive service catalog to ensure seamless service delivery (including centralized source for status updates).
- Built an analytical framework that the business would use to determine the priority of the service from an enterprise perspective.
- Defined a customer experience measurement mechanism to assess feedback across touchpoints.
- This operating model was championed by the COO and CIO, and is now the de facto operating model for this insurance company’s end users.

Benefits

Benefits of the solution include:

- Roughly 15% improvement in customer satisfaction due to the adoption of a business-aligned and standardized service intake and management approach.
- Approximately 15% reduction in time to market due to optimally prioritized demand for IT.
- About a 12% improvement in application management and support resource utilization.
- Organizational change of a massive scale impacting over 3,000 employees across business and IT.
Looking Ahead

As IT organizations look beyond traditional structures and silos to drive transformative change, innovation in IT service management has become a top focus area. To this end, organizations need to restructure the organizational model, redefine processes and transform the supporting technology through well-planned service innovation initiatives. These initiatives must be supported by a tailored organizational change management strategy to ensure successful adoption.

It is essential, therefore, for IT organizations to train and reskill their workforces to embrace modern technologies and practices. To socialize and assimilate change across the organization, an inclusive communications plan must be established to underscore the benefits of IT service management change. This transformation can only be sustained if a comprehensive approach to enable continuous improvement is communicated and embraced by all. As a result, organizations must commit to measure, analyze and revise their IT service management innovation strategy periodically to sustain industry-leading performance and business excellence.

Footnotes
1 “Left-shift” is a concept in software engineering that focuses on performing certain tasks earlier in the lifecycle to ensure a significant decrease in rework effort and costs associated with avoidable defects.
3 “Making the Shift to the Next-Generation Enterprise,” Cognizant Technology Solutions, March 2012.
5 “Technical debt” is a concept in programming that reflects the extra development work that arises when code that is easy to implement in the short run is used instead of applying the best overall solution; for more on this topic, see “Service Desk Innovation,” Virteva, January 2014.
6 Structured data resides in a fixed field within a record or file. This includes data contained in relational databases and spreadsheets. Unstructured data does not have a pre-defined data model and/or is not organized in a pre-defined manner. Such data can exist anywhere within the information ecosystem.
7 Best-in-class analytics tools deliver powerful analytical capabilities for data access and discovery, data transformation and modeling, data visualization and reporting.

References
• https://www.servicenow.com/
About the Authors

Philippe Dintrans is the Vice-President and Global Practice Leader within Cognizant Business Consulting’s Banking and Financial Services Group. Philippe has led numerous consulting engagements on business transformation, IT transformation and change management for marquee clients at Cognizant. He holds a master’s of science degree in engineering from the Massachusetts Institute of Technology (MIT) and an M.B.A. from INSEAD. He can be reached at Philippe.Dintrans@cognizant.com.

Amit Anand is a Director with Cognizant Business Consulting’s Strategic Services Group. He has more than 12 years of experience successfully leading and managing large IT transformation and operating model initiatives for various clients. Amit holds a bachelor’s degree from the IIT Delhi and an M.B.A. from the Indian School of Business, Hyderabad. He can be reached at Amit.Anand@cognizant.com.

Madhusudan Ponnuveetil is a Consulting Manager with Cognizant Business Consulting-Strategic Services Group. He has more than 10 years of experience leading large IT operating model innovations and change management initiatives. Madhu holds an M.B.A. from Asian Institute of Management, Philippines, and a bachelor’s degree in engineering from MSRIT, India. He can be reached at Madhusudan.Ponnuveetil@cognizant.com.

Srikanth Sridharan is a Consulting Manager with Cognizant Business Consulting-Strategic Services Group. He has 10 years of experience delivering IT strategy, IT operating model and process improvement initiatives, as well as organizational change management. Srikanth holds an M.B.A. from NUS Business School, Singapore, and a bachelor’s degree in engineering from BITS Pilani, India. He can be reached at Srikanth.Sridharan@cognizant.com.
About Cognizant Business Consulting

With over 3,600 consultants worldwide, Cognizant Business Consulting (CBC) offers high-value consulting services that improve business performance and operational productivity, lower operational expenses and enhance overall performance. Clients draw upon our deep industry expertise, program and change management capabilities and analytical objectivity to help improve business productivity, drive technology-enabled business transformation and increase shareholder value. To learn more, please visit http://www.cognizant.com/business-consulting or email us at inquiry@cognizant.com.

About Cognizant

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting, and business process outsourcing services, dedicated to helping the world’s leading companies build stronger businesses. Headquartered in Teaneck, New Jersey (U.S.), Cognizant combines a passion for client satisfaction, technology innovation, deep industry and business process expertise, and a global, collaborative workforce that embodies the future of work. With over 50 delivery centers worldwide and approximately 171,400 employees as of December 31, 2013, Cognizant is a member of the NASDAQ-100, the S&P 500, the Forbes Global 2000, and the Fortune 500 and is ranked among the top performing and fastest growing companies in the world. Visit us online at www.cognizant.com or follow us on Twitter: Cognizant.